



# LAKE ADVANCETOWN AUSTRALIAN BASS AND GOLDEN PERCH 2011-2020 2020 REVIEW

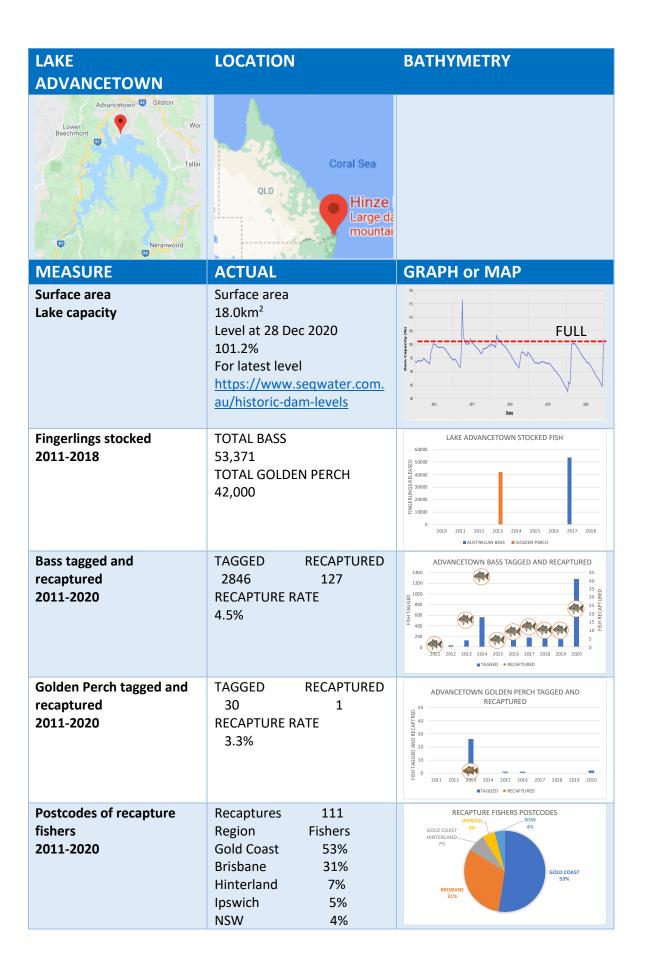
AVAILABLE		AVAILABLE	
Dam capacity	V	Storage level	V
Stocked fish numbers	$\overline{\mathbf{V}}$	Bathymetry	
Tagged fish	V	Recaptures	V
Postcodes 🔽		Competitions	
Species		Australian Bass	
Catch rates	$\overline{V}$	Fish sizes	V
Growth	$\overline{\mathbf{V}}$	Survival	V
Tag locations	$\checkmark$	Fish Movement	$\checkmark$
Species		Golden Perch	
Catch rates		Fish sizes	
Growth		Survival	
Tag locations		Fish Movement	

# Summary

- Fishing in the lake is limited to electric motors only
- Dam level on 28 Dec 2020 was 101.2%
- From 2011-2018 there were 53K Bass and 42K Golden Perch fingerlings released
- From 2011-2020 there were 2,846 Bass tagged for 127 recaptures (4.5%) while there were just 30 Golden Perch tagged for 1 recapture (3.3%)
- The Bass catch rate in 2020 was 13.0 fish/fisher day which was above the average historic catch rate of 9.5 fish/fisher day and the highest catch rate over the past 10 years but was influenced by large catches of 20+ fish on 18% of trips using bait
- The Bass average length in 2020 was 336mm and ranged from 200-570mm
- The percentage of legal Bass in 2020 was 60.8% with 3.3% trophy fish 500mm and over being the highest percentage of trophy fish in the last 10 years
- Over the past 10 years most Bass have been tagged in ADV map grids C32, C31, C33 in the western arm and H33 and D30 in the eastern arm
- Annual Bass growth calculated from tag recaptures at the end of year 1 is 34mm and at the end of year 5 is 72mm
- Of the 92 fish recaptured over the past 10 years only 2 has been recaptured outside the impoundment below the dam in the Nerang River
- Based on postcodes of fishers recapturing fish most were from the Gold Coast (53%), Brisbane (31%) and the Gold Coast Hinterland (7%)
- There were 4 fish recaptured by fishers with postcodes outside Queensland with all from just over the border in NSW

Infofish Australia March 2021





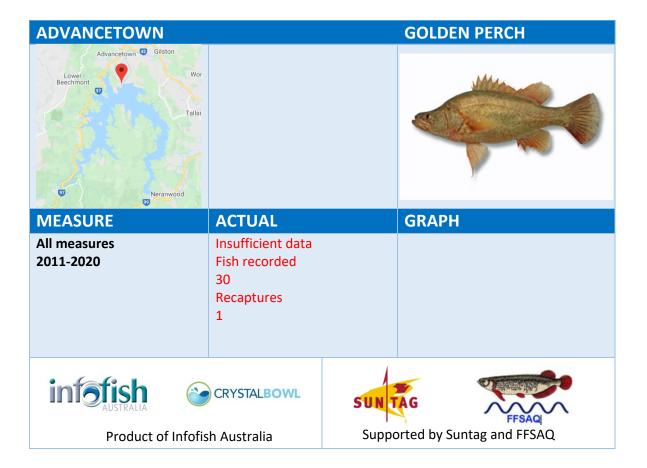
# ADVANCETOWN Advancetown Gilston Wor Beechmont Tallai

# **AUSTRALIAN BASS**



Neranwood				•
MEASURE	ACTUAL			GRAPH or MAP
Catch and effort number of fish fisher days T20 fishers (taggers) 2011-2020	HIGHEST CATCH 2014 679 EFFORT 2015 65	2019 135 2018 15	NOW  2020 1273  2020 98	ADVANCETOWN BASS  120 1200 1200 1200 1200 1200 1200 12
Catch rate Fish/fisher day 2011-2020	HIGHEST CATCH RA 2014 12.6 10 YEAR A	2017 6.1	NOW 2020 13.0 9.5	ADVANCETOWN BASS CATCH RATE  140  120  120  120  2010  2011  2012  2013  2014  2015  2016  2017  2018  2019  2020
Average length (mm) Bars show smallest and largest fish 2011-2020	HIGHEST 2016 367 LARGEST 2015 565	LOWEST 2013 296 2013 475	NOW 2020 336 2020 570	ADVANCETOWN BASS LENGTHS (MM)  TROPHY  TROPHY
Fish lengths percentage Undersize <300mm Legal 300-499mm Trophy 500+mm 2011-2020	HIGHEST LEGAL 2015 92.8 TROPHY 2015 1.2	2013 42.4 2018 0	NOW 2020 60.8 2020 3.3	ADVANCETOWN BASS LENGTHS  100% 90% 80% 70% 60% 40% 30% 20% 10% 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Bass growth at end of each year based on all recaptures	Recapture GROWTH Year 1 Year 2 Year 3 Year 4 Year 5	34mn 50mn 60mn 67mn 72mn	n n n	ADVANCETOWN BASS GROWTH  250  200  (W) 150  0 365 730 1095 1460 1825 2190 2555 2920 3285 3650 4015 4380 4745 DAYS OUT (YEARS)

Bass survival based on	Survival rate by years out	BASS SURVIVAL ADVANCETOWN
recaptures	Year Recaptures	120
by years out after tagging	1 111	2 1100 80 0 1100 100 100 100 100 10
by years out area tagging	5 37	P F F CAM
	10 1	W BE O
	Longest time out (years)	20
	11.9	1 2 3 4 5 6 7 8 9 10 11 12 YEARS OUT
Grid locations of tagged	Grids where most fish caugh	†
fish	GRID FISH	Las Indicas
2011-2020	C32 695	
2011-2020	C32 093	
	C31 279	
	H33 174	
	D30 135	
	D30 155	
Bass movement in lake	Recaptures 92	ADVANCETOWN BASS MOVEMENT
2011-2020	Recaptured same area	12
	28 (30.4%)	VED (G)
	Up lake Down lake	W) 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	21 28	8 -2 0 365 730 1695 1460 1875 2490 2555 2920
	Between arms	DAYS OUT (YEARS)
	13	● UP LAKE ● DOWN LAKE ● BETWEEN ARMS
Bass recaptured outside	Below dam	Net no.
impoundment	Nerang River	
2011-2020	2	
	Above lake	Cower Becchmont
	0	ADVANCETOWN
		undergrand Ration



### **Data sources**

Data used in the Impoundment Crystal Bowl are:

- Tag records and recapture records for the impoundment at <a href="http://crystalbowl.infofishaustralia.com.au/">http://crystalbowl.infofishaustralia.com.au/</a>
- Dam level data from SEQwater at <a href="https://www.seqwater.com.au/historic-dam-levels">https://www.seqwater.com.au/historic-dam-levels</a>
- Bathymetric data from Infofish surveys or other sources

## **Basis for analysis**

- Catch rates calculated as number of fish tagged/fisher/day for T20 fishers (taggers) with a minimum of 12 fisher days (at least 1 per month) to provide a reliable catch rate
- Undersized fish are <300mm, legal fish are >=300 and <500mm and trophy fish are >=500mm
- Growth calculated using logarithmic curve from recaptures where fish were out for 90 days or more and had positive growth
- Locations based on Infofish grid map ADV for the impoundment and other grid maps where fish were recaptured outside the impoundment
- Distance moved was the shortest distance by water between the tag and recapture location measured in Google Earth